

NEW

6-YEAR OLD

Test Dummy

Model Number: 127-0000



HYBRID III

Creating the New Standard in ATD's



The Hybrid III 6-Year Old Child project was originally started in 1986 as a collaboration between the Centers for Disease Control and Prevention (CDC) and The Ohio State University. The Society of Automotive Engineers (SAE) and the National Highway Transport Safety Administration (NHTSA) also contributed to the ATD's design and testing refinements. The goal was to define the size, weight, and impact response characteristics for a 6-year old child dummy and incorporate them with the same biofidelity and measurement capacity as a Hybrid III 50th Percentile Adult Male ATD.

Size and weight specifications for the Hybrid III 6-Year Old are based on anthropometric studies of the characteristic dimensions of 6-year-old boys and girls. The biofidelic impact response corridors for the head neck, thorax, and knees correspond to the Hybrid III adult male responses scaled for size and weight.

The Hybrid III 6-Year Old was upgraded in 1997 for the evaluation of "Out of Position" (OOP) airbag aggressiveness testing.

The Hybrid III 6-Year Old Child ATD is specified under Title 49 CFR Part 572, Subpart N.

The calibration and certification tests performed prior to shipment include:

- Head Drop
- Neck Flexion and Extension
- Thorax Impact
- Knee Impact
- Torso Flexion

Standard equipment included in the base price of this test device:

- Chest Deflection Transducer
- Six Axis Neck Transducer Structural Replacement
- Accelerometer mounts for Head, Chest and Pelvis *User must specify the accelerometer manufacturer and type at the time of order placement.
- Anterior Superior Iliac Spine Load Cell Structural Replacement
- Tibia-Femur Displacement Transducer Structural Replacements (One Pair)

WEIGHTS:	Pounds (lbs.)	Kilograms
Head	7.66	3.47
Neck	1.20	.54
Upper Torso	12.25	5.56
Lower Torso	13.75	6.24
Upper Arm	1.05	.48
Lower Arm w/hand	1.37	.62
Upper Leg	3.20	1.45
Lower Leg and Foot	2.75	1.25
Total Weight	51.60	23.41

DIMENSIONS:	Inches	Centimeters
Head Circumference	20.50	52.07
Head Breadth	5.60	14.22
Head Depth	6.80	17.23
Shoulder to Elbow Length	8.80	22.35
Buttock to Knee Length	15.00	38.10
Knee Pivot Height	12.40	31.50
Sitting Height	25.00	63.50
Standing Height	44.90	114.05